DOCUMENT RESUME

ED 201 390 PS 012 130

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TITLE A Follow-Up Study of Sex Stereotyping in Child-Selected Play Activities of Preschool Children.
PUB DATE Sep 80
NOTE 51p.; For related document, see ED 186 102.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Age Differences; *Change; Females; Followup Studies; Longitudinal Studies; Males; Observation; *Play; *Preschool Children; Preschool Education; *Sex Differences; *Sex Stereotypes
IDENTIFIERS Blocks

ABSTRACT

A follow-up study was conducted to determine if changes would occur in the sex stereotyping of child- selected play activities over a 6-month period. Subjects were fifty 3-, 4-, and 5-year-old children enrolled in nursery school programs at a midwestern university during the 1979-80 school year. For one 6-week period in the fall and one in the spring, three observers recorded the number of boys or girls that participated in "traditionally female-oriented activities" (house play, books, art projects, table activities) and "traditionally male- oriented activities" (with blocks, wheeled vehicles, climbing apparatus, and water or sand). During each 6-week period subjects were observed 3 days a week. Comparison between the autumn and the spring studies revealed only one significant change: blocks changed from a sex stereotyped play activity in the autumn to a non-sex stereotyped play activity in the spring. The other seven child-selected play activities were not sex stereotyped at a statistically significant level in either study. Based on these results it was concluded that sex stereotyping of child-selected play activities did not increase with age. (Author/MP)

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ED201390

A FOLLOW-UP STUDY OF SEX STEREOTYPING IN CHILD-SELECTED PLAY ACTIVITIES OF PRESCHOOL CHILDREN

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SEPTEMBER 1980

PS012130

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INTRODUCTION

Purpose of This Study

This follow-up study was to examine Hurlock's suggestion that sex stereotyping of play activities increased with age.[1] The purpose of this follow-up study was to determine if changes occurred in the sex stereotyping of the child-selected play activities over a six month time period.[2]

Review of Autumn Study

The purpose of this research was to study child-selected play activities of three-, four-, and five-year old children to determine whether the choices reflected society's traditionally sex stereotyped labels.

The fifty subjects were enrolled in nursery school programs under the auspices of a department of elementary education at a mid-western university in the autumn of 1979. The twenty-five males and twenty-five females ranged in age from thirty-six months to sixty-four months.

Modifying Rubin's list of the most frequently observed pre-school activities, eight child-selected play activities were

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[1]Elizabeth B. Hurlock, Child Development, 5th ed. (New York: McGraw-Hill Book Company, 1972), 192.

[2]Betty Spillers Beeson and R. Ann Williams, A Study of Sex Stereotyping in Child-Selected Play Activities of Preschool Children (Bethesda, MD: ERIC Document Reproduction Service, ED 186 102, November, 1979), 58 pp.

examined.[3] On the basis of cultural tradition, the play activities were labeled as male- or female-oriented.

Traditionally Male-Oriented	Traditionally Female-Oriented
blocks	house play
wheeled vehicles	books
climbing apparatus	art projects
water/sand	table activities

These traditional labelings of male- or female-oriented activities come from the common beliefs society holds in regard to sex stereotyping. Boys are more active, noisier, and messier than girls. Girls are less active, quieter, and neater than boys. Boys excel in large muscle activities and girls in fine muscle activities.

An observation instrument to record the child's daily choices of play activities was developed by the researchers (see Appendix D). Three graduate students were observers. The children were observed three days a week for six weeks during September and October. Two play activities, house play and books, were available on the eighteen observation days. Six play activities (art projects, table activities, blocks, wheeled vehicles, climbing apparatus, and water/sand) were available on nine observation days (see Appendix C).

First, the data were analyzed by the number and the percent

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[3]Kenneth H. Rubin, "Play Behaviors of Young Children," Young Children 32 (1977): 21.

of boys and of girls selecting each play activity. Then, the chi square test was utilized to determine if the difference in the number of boys and of girls selecting each play activity was statistically significant. This data are reviewed in Table 1.

Table 1

AUTUMN

CHI SQUARE VALUES FOR EACH

PLAY ACTIVITY

Play Activity	Autumn Chi Square Value
House Play	0.17
Books	0.06
Art Projects	1.21
Table Activities	0.03
Blocks	4.22*
Wheeled Vehicles	1.72
Climbing Apparatus	0.03
Water/Sand	0.34

*level of significance .05

Findings

All four of the traditionally female-oriented play activities (house play, books, art projects, and table activities) were chosen by a larger number and percent of girls than of boys. However, the difference between the number of boys and of girls selecting the activities was not statistically significant at the .05 level. Therefore, house play, books, art projects, and table activities were not sex stereotyped, but play activities chosen by both boys and girls. These findings differ from earlier studies which found house play and art projects to be female-oriented. In agreement with previous research no sex differences were found for books and table activities. (see Table 2)

Two of the traditionally male-oriented play activities, wheeled vehicles and water/sand, were chosen by a larger number and percent of boys than girls. However, the difference between the number of boys and of girls selecting the activities was not statistically significant at the .05 level. Therefore, wheeled vehicles and water/sand were not sex stereotyped, but play activities chosen by both boys and girls. These findings differ from earlier studies which found wheeled vehicles and water/sand to be male-oriented.

One of the traditionally male-oriented play activities,

TABLE 2

PREVIOUS STUDIES REPORTING SEX DIFFERENCES

IN PLAY ACTIVITIES OF YOUNG CHILDREN

Study*	Sex Difference	Findings
Parten (1933)	Girls	Art activities and house play
	Boys	Trains, kiddie-kars, blocks
Clark, Wyon and Richards (1969)	Girls	Dolls and art activities
	Boys	Blocks and wheeled vehicles
Coates, Lord, and Jakabouics (1975)	Girls	Dolls and formal games
	Boys	Blocks
Harper and Sanders (1975)	Girls	Crafts
	Boys	Sand, climbing apparatus, tractor
Tizard, Philps, and Plewis (1976)	Girls	Fixed physical equipment (climbing frame)
	Boys	Wheeled vehicles, crates, and tires
Rubin (1977)	Girls	Art activities
	Boys	Blocks and wheeled vehicles

*See Bibliography

climbing apparatus, was chosen by a larger number and percent of girls than of boys. However, the difference between the number of boys and of girls selecting the activity was not statistically significant at the .05 level. Therefore, climbing apparatus was not sex stereotyped, but a play activity chosen by both boys and girls. This finding of no sex difference tends to explain the conflicting research of earlier studies, one reported more boys and another more girls played with climbing apparatus.

The fourth traditionally male-oriented play activity, blocks, was the only play activity to produce statistically significant sex differences at the .05 level. Blocks was a sex stereotyped activity with a significantly larger number of boys than of girls playing with them. This finding corroborated that of earlier studies.

Conclusions

Limited by the population, the instrument, and the statistical procedure utilized in this research, the presence of sex stereotyping in child-selected play activities had diminished markedly from that reported in earlier studies. Of the eight child-selected play activities examined, only one, blocks, continued to be sex stereotyped and to mirror the traditional label of male-oriented.

It would appear from this study that the changing societal attitude and the national movement toward eliminating sexism is being reflected in the play activities of young children.

THE SPRING STUDY

There were forty-seven subjects, twenty-four males and twenty-three females. This was a loss of three subjects from the autumn study. The subjects were now six months older and ranged in age from forty-two months to seventy months.

The same eight child-selected play activities were examined.

Traditionally Male-Oriented	Traditionally Female-Oriented
blocks	houseplay
wheeled vehicles	books
climbing apparatus	art projects
water/sand	table activities

The same observation instrument was used (see Appendix D). Two observers were utilized; one from the autumn study and another one who was trained by the researchers.

The same observation schedule was followed (see Appendix C). The children were observed three days a week for six weeks during March and April. Two play activities, house play and books, were available on the eighteen observation days. Six play activities (art projects, table activities, blocks, wheeled vehicles, climbing apparatus, and water/sand) were available on nine observation days.

Results

The detailed description of the statistical procedure will be described in the first child-selected play activity, house play, but will not be repeated for the other seven activities. Only table and results will be given for these.

House Play

The number of different boys and of different girls selecting house play on each of the eighteen observation days is shown in Table 3. Using this number and the number of boys and of girls present that day, the percent of boys and of girls selecting the activity was computed. This data also are given in Table 3.

From the daily number of boys and of girls selecting house play and the daily attendance, averages were computed. Table 3 presents the average number of boys and of girls and the average percent of boys and of girls selecting house play during the total eighteen days.

As shown in Table 3, more girls and a higher percentage of girls chose house play as a child-selected play activity.

A chi square was used to test the null hypothesis of no difference in the number of boys and of girls selecting house play. The Yates correction was used for frequencies less than five. The formula for computing this statistic was as follows:

$$\chi^2 = \Sigma \frac{(f_o - f_e)^2}{f_e}$$

The observed frequency (f_o) was the average number of boys and of girls selecting house play. The expected frequency (f_e) was obtained by adding the average number of boys and of girls, then dividing by two. This was based on the premise that if the play activity was not sex stereotyped, half the children selecting house play should be boys and half should be girls. The data for chi square are summarized in Table 4.

TABLE 3

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING HOUSE PLAY

(SPRING 1980)

Observation Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Average for Observation Period
Boys Present	24	23	20	23	21	24	21	18	20	21	22	17	18	22	23	23	20	22	21.2
Boys Selecting Activity	10	8	4	6	4	4	6	4	9	6	1	2	0	3	1	4	7	5	4.7
Percent of Boys Selecting Activity	41.7	34.8	20.0	26.1	19.0	16.7	28.6	22.2	45.0	28.6	4.5	11.8	0.0	13.6	4.3	17.4	35.0	22.7	22.0
Girls Present	21	21	19	19	19	20	19	18	20	21	21	16	17	16	22	21	21	22	19.6
Girls Selecting Activity	9	9	7	8	6	7	3	9	5	8	5	4	3	4	7	9	9	8	6.7
Percent of Girls Selecting Activity	42.9	42.9	36.8	42.1	31.6	35.0	15.8	50.0	25.0	38.1	23.8	25.0	17.6	25.0	31.8	42.9	42.9	36.3	34.0

Table 4

THE CHI SQUARE TABLE FOR

HOUSE PLAY

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	4.7	5.7
Girls	6.7	5.7

The chi square value needed to reject the null hypothesis at the .05 level of significance with one degree of freedom was 3.84. The chi square value obtained was 0.35 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting house play.

Books

The number of different boys and of different girls and the percent of boys and of girls selecting books on each of the eighteen observation days is given in Table 5.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting books during the total eighteen days.

As shown in Table 5, more girls and a higher percentage of girls chose books as a child-slected play activity.

TABLE 5

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING BOOKS

(SPRING 1980)

Observation Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Average for Observation Period
Boys Present	24	23	20	23	21	24	21	18	20	21	22	17	18	22	23	23	20	22	21.2
Boys Selecting Activity	3	3	5	13	7	6	2	0	5	7	9	0	6	5	2	2	2	5	4.6
Percent of Boys Selecting Activity	12.5	13.0	25.0	56.8	33.3	25.0	9.5	0.0	25.0	33.3	40.9	0.0	33.3	22.7	8.7	8.7	10.0	22.7	21.5
Girls Present	21	21	19	19	19	20	19	18	20	21	21	16	17	16	22	21	21	22	19.6
Girls Selecting Activity	5	6	1	7	9	6	4	2	2	4	4	0	6	1	0	1	1	4	3.5
Percent of Girls Selecting Activity	23.8	28.6	5.3	36.8	47.4	30.0	21.1	11.1	10.0	19.0	19.0	0.0	35.3	6.3	0.0	4.8	4.8	18.2	17.8

The data for chi square are summarized in Table 6. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 0,00 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting books.

TABLE 6

THE CHI SQUARE DATA FOR

BOOKS

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	4.6	4.0
Girls	3.5	4.0

Art Projects

The number of different boys and of different girls and the percent of boys and of girls selecting art projects on each of the nine observation days is given in Table 7.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting art projects during the total nine days.

As shown in Table 7, more girls and a higher percentage of girls chose art projects as a child-selected play activity.

TABLE 7

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING ART PROJECTS

(SPRING 1980)

Obervation Day	1	2	3	4	5	6	7	8	9	Average for Observation Period
Boys Present	24	23	20	21	18	20	18	22	23	21.0
Boys Selecting Activity	5	5	7	8	10	6	10	4	9	7.1
Percent of Boys Selecting Activity	20.8	21.7	35.0	38.1	55.6	30.0	55.6	18.2	39.1	33.9
Girls Present	21	21	19	19	18	20	17	16	22	19.2
Girls Selecting Activity	11	11	10	12	12	14	10	12	9	11.2
Percent of Girls Selecting Activity	52.4	52.4	52.6	63.2	66.7	70.0	58.8	75.0	40.9	58.4

The data for chi square are summarized in Table 10. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 0.92 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting art projects.

TABLE 8

THE CHI SQUARE DATA FOR

ART PROJECTS

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	7.1	9.2
Girls	11.2	9.2

Table Activities

The number of different boys and of different girls and the percent of boys and of girls selecting table activities on each of the nine observation days is given in Table 9.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting table activities during the total nine days.

As shown in Table 9, more girls and a higher percentage of girls chose table activities as a child-selected play activity.

TABLE 9

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING TABLE ACTIVITIES

(SPRING 1980)

Obervation Day	1	2	3	4	5	6	7	8	9	Average for Obeservation Period
Boys Present	23	21	24	21	22	17	23	20	22	21.4
Boys Selecting Activity	14	9	10	16	12	5	7	5	11	9.9
Percent of Boys Selecting Activity	60.9	42.9	41.7	76.2	54.5	29.4	30.4	25.0	50.0	46.1
Girls Present	19	19	20	21	21	16	21	21	22	20.0
Girls Selecting Activity	6	10	10	13	14	5	14	11	15	10.9
Percent of Girls Selecting Activity	31.6	52.6	50.0	61.9	66.7	31.3	66.7	52.4	68.2	54.5

The data for chi square are summarized in Table 10. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 0.05 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting table activities.

TABLE 10

THE CHI SQUARE DATA FOR

TABLE ACTIVITIES

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	9.9	10.4
Girls	10.9	10.4

Blocks

The number of different boys and of different girls and the percent of boys and of girls selecting blocks on each of the nine observation days is given in Table 11.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting blocks during the total nine days.

As shown in Table 11, more boys and a higher percentage of boys chose blocks as a child-selected play activity.

TABLE 11

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING BLOCKS

(SPRING 1980)

Obervation Day	1	2	3	4	5	6	7	8	9	Average for Obeervation Period
Boys Present	24	23	20	21	18	20	18	22	23	21.0
Boys Selecting Activity	14	12	15	12	10	10	9	10	11	11.4
Percent of Boys Selecting Activity	58.3	52.2	75.0	57.1	55.6	50.0	50.0	45.5	47.8	54.5
Girls Present	21	21	19	19	18	20	17	16	22	19.2
Girls Selecting Activity	2	5	7	7	8	3	2	3	3	4.4
Percent of Girls Selecting Activity	9.5	23.8	36.8	36.8	44.4	15.0	11.8	18.8	13.6	23.1

The data for chi square are summarized in Table 12. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 3.08 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting blocks.

TABLE 12

THE CHI SQUARE DATA FOR

BLOCKS

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	11.4	7.9
Girls	4.4	7.9

Wheeled Vehicles

The number of different boys and of different girls and the percent of boys and of girls selecting wheeled vehicles on each of the nine observation days is given in Table 13.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting wheeled vehicles during the total nene days.

As shown in Table 13, more boys and a higher percentage of boys chose wheeled vehicles as a child-selected play activity.

TABLE 13

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING WHEELED VEHICLES

(SPRING 1980)

Obervation Day	1	2	3	4	5	6	7	8	9	Average for Observation Period
Boys Present	23	21	24	21	22	17	23	20	22	21.4
Boys Selecting Activity	11	16	17	12	15	11	15	11	13	13.4
Percent of Boys Selecting Activity	47.8	76.2	70.8	57.1	68.2	64.7	65.2	55.0	59.1	62.7
Girls Present	19	19	20	21	21	16	21	21	22	20.0
Girls Selecting Activity	5	6	8	10	7	2	6	5	5	6.0
Percent of Girls Selecting Activity	26.3	31.6	40.0	47.6	33.3	12.5	28.6	23.8	22.7	30.0

The data for chi square are summarized in Table 14. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 2.85 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting wheeled vehicles.

TABLE 14

THE CHI SQUARE DATA FOR

WHEELED VEHICLES

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	13.4	9.7
Girls	6.0	9.7

Climbing Apparatus

The number of different boys and of different girls and the percent of boys and of girls selecting climbing apparatus on each of the nine observation days is given in Table 15.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting climbing apparatus during the total nine days.

As shown in Table 15, more girls and a higher percentage of girls chose climbing apparatus as a child-selected play activity.

TABLE 15

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING CLIMBING APPARATUS

(SPRING 1980)

Obervation Day	1	2	3	4	5	6	7	8	9	Average for Obeservation Period
Boys Present	23	21	24	21	22	17	23	20	22	21.4
Boys Selecting Activity	17	10	10	13	9	3	6	8	12	9.8
Percent of Boys Selecting Activity	73.9	47.6	41.7	61.9	40.9	17.6	26.1	40.0	54.5	45.6
Girls Present	19	19	20	21	21	16	21	21	22	20.0
Girls Selecting Activity	13	6	13	16	9	13	13	9	12	11.6
Percent of Girls Selecting Activity	68.4	31.6	65.0	76.2	42.9	81.3	61.9	42.9	54.5	57.8

The data for chi square are summarized in Table 16. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 0.15 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting climbing apparatus.

TABLE 16

THE CHI SQUARE DATA FOR

CLIMBING APPARATUS

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	9.8	10.7
Girls	11.6	10.7

Water/Sand

The number of different boys and of different girls and the percent of boys and of girls selecting water/sand on each of the nine observation days is given in Table 17.

Also, presented in this table are the average number of boys and of girls and the average percent of boys and of girls selecting water/sand during the total nine days.

As shown in Table 17, more boys and a higher percentage of boys chose water/sand as a child-selected activity.

TABLE 17

THE DAILY AND THE AVERAGE

NUMBER AND PERCENT OF BOYS/GIRLS

SELECTING WATER/SAND

(SPRING 1980)

Obervation Day	1	2	3	4	5	6	7	8	9	Average for Obeervation Period
Boys Present	24	23	20	21	18	20	18	22	23	21.0
Boys Selecting Activity	14	16	6	8	12	12	11	19	14	12.4
Percent of Boys Selecting Activity	58.3	69.6	30.0	38.1	66.7	60.0	61.1	86.4	60.9	59.3
Girls Present	21	21	19	19	18	20	17	16	22	19.2
Girls Selecting Activity	10	5	5	8	6	8	11	7	9	7.7
Percent of Girls Selecting Activity	47.6	23.8	26.3	42.1	33.3	40.0	64.7	43.8	40.9	39.9

The data for chi square are summarized in Table 18. The chi square value needed to reject the null hypothesis was 3.84. The chi square value obtained was 1.14 and, therefore, the null hypothesis was not rejected. There was no significant difference in the number of boys and of girls selecting water/sand.

TABLE 18

THE CHI SQUARE DATA FOR

WATER/SAND

(SPRING 1980)

Subjects	Observed Frequency	Expected Frequency
Boys	12.4	10.1
Girls	7.7	10.1

Findings

The four traditionally female-oriented activities (house play, books, art projects, and table activities) were not statistically significant at the .05 level. Therefore, house play, books, art projects, and table activities were not sex stereotyped, but play activities chosen by both boys and girls. These findings differ from earlier studies which found house play and art activities to be female-oriented. They agree with previous research which reported no sex differences for books and table activities. (See Table 2 for previous studies.)

The four traditionally male-oriented activities (blocks, wheeled vehicles, climbing apparatus, and water/sand) were not statistically significant at the .05 level. Therefore, blocks, wheeled vehicles, climbing apparatus, and water/sand were not sex stereotyped, but play activities chosen by both boys and girls. The finding of no sex difference for climbing apparatus tends to explain the conflicting findings of earlier studies, one study reporting more boys and another more girls.

Conclusions

Limited by the population, the instrument, and the statistical procedure utilized in this research, there has been a marked change in the sex stereotyping in child-selected play activities from that reported in earlier studies. Six of the child-selected play activities have been reported to be sex-stereotyped in previous research. However, in this study none of the eight child-selected play activities produced significant sex differences.

It would appear, with this statistical technique, that the changing societal attitude and the national movement toward eliminating sexism has had an impact on the sex stereotyping of young children's play activity.

COMPARISON OF AUTUMN AND SPRING DATA

The procedure for the collection of data was the same for the autumn and the spring study. The only difference in the two studies was the number of subjects and the age of the subjects. In the autumn, there were fifty subjects, twenty-five males and twenty-five females. In the spring, there were forty-seven subjects, twenty-four males and twenty-three females. This was a loss of three subjects. The subjects were six months older in the spring.

Results

The comparison of the chi square values for the autumn and the spring studies is given in Table 19.

Only one of the eight child-selected play activities was statistically significant in the autumn. Blocks were sex stereotyped with more boys than girls selecting them.

None of the eight child-selected play activities were statistically significant in the spring. The activities were not sex stereotyped but selected by both boys and girls.

Findings

There was only one change in the chi square significances from the autumn to the spring. Blocks were statistically significant in the autumn, but were not in the spring. Blocks changed from a sex stereotyped play activity in the autumn to a non-sex stereotyped play activity in the spring.

Table 19

COMPARISON OF AUTUMN AND SPRING

CHI SQUARE VALUES FOR EACH

PLAY ACTIVITY

Play Activity	Autumn Chi Square Value	Spring Chi Square Value
House Play	0.17	0.35
Books	0.06	0.00
Art Projects	1.21	0.92
Table Activities	0.03	0.05
Blocks	4.22*	3.08
Wheeled Vehicles	1.72	2.85
Climbing Apparatus	0.03	0.15
Water/Sand	0.34	1.14

*level of significance .05

The other seven child-selected play activities (house play, books, art projects, table activities, wheeled vehicles, climbing apparatus, and water/sand) were not statistically significant either autumn or spring. They were not sex stereotyped in either study.

Conclusions

Sex stereotyping of child-selected play activities did not increase with age as predicted by Hurlock.[4] Indeed, the one sex stereotyped play activity in the autumn became non-sex stereotyped by spring. In the autumn significantly more boys than girls selected blocks. However, in the spring there was no significant difference in the number of boys and of girls selecting blocks.

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[4]Elizabeth B. Hurlock, Child Development, 5th ed. (New York: McGraw-Hill Book Company, 1972), 192.

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APPENDIX A

Letter of Permission

BALL STATE UNIVERSITY MUNCIE, INDIANA 47306

March 10, 1980

Dear Parents:

We will be conducting a follow-up of our fall research study to determine what children choose to do during child-selected activities. Our study will begin on March 17th and continue until April 23rd.

While the children are participating in the regular child-selected activities, observers will keep a checklist on the activities chosen.

All information about an individual child's selection of activities will be kept confidential. Also, you may withdraw your child from this study at any time and without prejudice.

If your child may be included, please sign below and return it to us by Wednesday, March 12, 1980.

Thank you.

Sincerely,

Dr. Betty Beeson

Dr. Ann Williams

I give permission for my child's _____
(name of child)
participation in Dr. Beeson's and Dr. Williams' study.

Parent Signature _____

Date _____

APPENDIX B

LIST OF PLAY ACTIVITY

TOYS AND MATERIALS

1. Wheeled Vehicles
2. Blocks
3. Water or Sand Table
4. Climbing Apparatus
   a. Jungle Gym
   b. Balance Beam
   c. Slide
5. Art Projects
   a. Crayons
   b. Easel
   c. Finger Painting
   d. Collage
   e. Play Dough
6. Table Activities
   a. Puzzles
   b. Lego Toys
   c. Tinker Toys
   d. Peg Boards
   e. Lacing Cards
7. House Play
   a. Dress-up Clothes
   b. Dolls
   c. Dishes
   d. Doctor and Nurse Toys
8. Books

APPENDIX C

SCHEDULE FOR CHILD-SELECTED PLAY ACTIVITIES

WEEK 1	WEEK 2
House Play	House Play
Books	Books
Blocks	Wheeled Vehicles
Art Projects	Table Activities
Water/Sand	Climbing Apparatus

WEEK 3	WEEK 4
House Play	House Play
Books	Books
Blocks	Wheeled Vehicles
Art Projects	Table Activities
Water/Sand	Climbing Apparatus

WEEK 5	WEEK 6
House Play	House Play
Books	Books
Blocks	Wheeled Vehicles
Art Projects	Table Activities
Water/Sand	Climbing Apparatus

APPENDIX D

Observer Checklist Sheet
Even Weeks

CHILD SELECTED ACTIVITIES

L-L-L _____ Date _____ Observer _____

Scheidler _____ Time _____ Class _____

Name of Activity	Child's Name													
7. House Play														
8. Books														
1. Wheeled Vehicles														
6. Table Activities														
4. Climbing Apparatus														

44

Absent:

Boys _____

Girls _____

43

42

Observer Checklist Sheet
Odd Weeks

CHILD-SELECTED ACTIVITIES

L-L-L _____ Date _____ Observer _____

Scheidler _____ Time _____ Class _____

Name of Activity	Child's Name												
7. House Play													
8. Books													
2. Blocks													
5. Art Projects													
3. Water/Sand													

Absent:

Boys _____

Girls _____

APPENDIX E

Weekly Tally Sheet
Even Weeks

Week of _____

Group _____

	Monday		Tuesday		Wednesday		Total for the Week	
Name of Activity	B	G	B	G	B	G	B	G
7. House Play								
8. Books								
1. Wheeled Vehicles								
6. Table Activities								
4. Climbing Apparatus								

Absent:

Boys _____ _____ _____ _____

Girls _____ _____ _____ _____

45

Weekly Tally Sheet
Odd Weeks

Week of _____

Group _____

	Monday		Tuesday		Wednesday		Total for the Week	
Name of Activity	B	G	B	G	B	G	B	G
7. House Play								
8. Books								
2. Blocks								
5. Art Projects								
3. Water/Sand								

Absent:

Boys _____ _____ _____ _____

Girls _____ _____ _____ _____

APPENDIX F

DIRECTIONS FOR OBSERVERS CHECKLIST SHEET

1. Observation is to be made during Child-Selected Activity:

   L-L-L

   Morning 9:00 - 9:30 a.m.

   Afternoon 1:00 - 1:30 p.m.

   SCHEIDLER

   Afternoon 1:15 - 1:45 p.m.

2. Observation is to be for thirty minutes.
3. There is an Observation Checklist Sheet for odd and even weeks. See schedule.
4. The child must persist at the activity for at least three minutes before entering on the observation sheet.
5. When a child has participated in the activity for three minutes, record his or her name by the appropriate activity.
6. Weekly Tally Sheet is to be completed for each week.